53 River St. Committee Meeting

Acton Recreation Department

50 Audubon Dr. Acton

September 19, 2018

Present: all members and various citizens.

Opened at 7pm

Citizen's concerns: None from the public. Peter will be absent for Oct. and Nov. due to health matters. Bill Klauer will lead the meetings.

Bettina received a letter from Rachel Hart Office of Dam Safety, which stated dam will be classified as a significant (Class II) hazard structure. The dam will be registered as such with the Office of Dam Safety.

Fun Facts about S Acton History: North Acton Recreation Area was renamed Nathaniel Allen Recreation Area, in honor of a local civil war hero. Historic doc on his life distributed and will be uploaded to DocuShare.

Approval of September 5th **minutes:** Unanimously approved with typos corrected.

Guest Speaker Gabe Bolin, PE (Professional Engineer) presented an audio visual power point regarding dam removal. Gabe spoke about the damage from Tropical Storm Irene and Hurricane Sandy regarding the wild fishery. Rivers had been mined for the river rocks. But when you take this material out, the river channel will dissipate the energy out by erosion, and the channel can disconnect from the flood plain. Streams at the end will have lower slopes, and may meander, and spread out in the flood plain.

In the case of Fort Pond Brook, the railroad and River Street constrain the river meander beltway. The role of flood plains is to accept the overflow during a rain event, providing flood relief, and controlling erosion. If there is no access to the flood plain the river will cause erosion, causing the sides to fall in, and eventually the erosion that falls into the river will result in a new flood plain.

Bill K asked how do we know what the dam should be restored to? Gabe would expand his search beyond the property, to see how the river behaves upstream and downstream. He would also look at some of the other local rivers. Would the railroad and the River Street allow a practical redraw of the river? Gabe felt it could be done. Sediment behind the dam could be removed. Slopes up and down stream would be studied to get an estimate of what the slopes should be in this plot of land. Samples of the sediment would need to be analyzed for contaminants for the state's requirements. Gabe would also characterize the dam, i.e. how much concrete is there, is there a foot? When the dam is removed, the artificially high 100 year flood level will be lowered as well. Adding a sinuous pathway will add to the river's ability to absorb or dissipate the energy of the excess water during a heavy rain. When the dam is removed, the stream will likely create its own meandering channels. Will the dam removal cause erosion downstream near the houses downstream? Gabe said a model could be created to predict the

2 year and 100 year flood to study the erosion. Delineate the water shed, then a HEC-RAS (Army Corps of Engineers hydraulic study) study should be done. It was mentioned that this is really a short stretch with which to add meandering.

Discussion: Letter from AHC dated 8-15-19. Doug Herrick, chair of Acton Historical Society, addressed the committee. He said they had not been able to see the site. A dam is also an historic entity. The historic area of focus will be the mill era. He is familiar with the nature of dams, lives on Brook St. He would like to study what is on site. His committee would like to have input into the usage, historically, and ecologically. He would like to know what is driving the predisposition of dam removal. Selby stated that the Conway School concept study was instructed to plan with dam removal. Would we be losing the pond/wetlands above the dam? The dam carries liability due to its condition, and there is an emphasis from state to remove dams to encourage natural fish and plants. For the town keep the dam, there would be annual maintenance costs. This site may qualify for National Register status. 53 River Street is on MACRIS, but has not been developed as a historic site. Doug was encouraged to walk the site, to do the historical inventory. Doug stated that the Division of Ecological Restoration favors the removal of dams for ecological reasons. DER is a funding opportunity to understand the dynamics. GZA qualified the condition of the dam as poor. Historic aspects of this site will be preserved. Dialog will be kept open. The Historic District Committee has jurisdiction over the site. This committee is encouraged to present to HDC so as to discover their stance, even before we have decided a plan of action. Two weeks ago, Tom Cristopher showed a removal of dam where they honored the historic aspect of the dam. Breech of the dam may eliminate the failure from excess water. What happens to the rest of the site if the entire dam is removed? Would removing only the top portion of the dam satisfy the Historic Commission? Peter encouraged the AHC to do the study needed, and gives us feedback and scope of work required by them.

Discussion: CPA Application. The Community Preservation Committee had a meeting last week. The question was discussed as to whether the 53 River Street property would be eligible for CPA because the town purchased the property with general funds. It is possible we could put to use other than what the CPA funds. A 2017 memo from Town Counsel regarding a CPA application for 53 River Street is inconclusive, suggests calling it recreational, a judgement call from CPA. Selby recommends that this committee recommend that whatever usage we decide it should be within the CPA guidelines.

Next Steps: If the Committee desires to apply for CPA funds this year, we have 2 meetings before we need to submit an application (due October 30 to the Town Manager). We must start with the hydrologic and hydraulic studies. Tighe & Bond will study the structure itself, including H&H. We can do the wetlands delineations in house. The committee directed Selby to get 3 quotes for the structural engineering study of the dam's condition.

Next meeting: October 3rd. FinCom would like to see us apply to CPA to reimburse for the \$875K cost to purchase. AHC will add this site to their list, and apply to CPA for the formal survey cost.

Adjourned at 9:09pm

Respectfully submitted by Michele Holland